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5,618,285	4/08/97	Zair	606	10			
5,720,894	2/24/98	Neev et al.	216	65			
FOREIGN PATENT DOCUMENTS							
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OR

 Jean-Luc Boulnois, "Photophysical Processes in Recent Medical Laser Developments: A Review" Lasers in Med. Sci. Vol. 1, pp. 47-66 (1986)

TR

- Anita M.R. Fisher, et al. "Clinical and Preclinical Photodynamic Therapy" Lasers in Surgery and Medicine 17:2-31, pp. 2-31 (1995)

JR

- Antony R. Young, "Photocarcinogenicity of Psoralens Used In Puva Treatment: Present Status In Mouse and Man" Journal of Photochem. and Photobiol. B: Biology, 6, pp. 237-247 (1990)

JR

- M.J. Wirth, et al. "Two-Photon Excited Molecular Fluorescence in Optically Dense Media" Analytical Chem. Vol. 49, no. 13, pp. 2054-2057 (11/1977)

EXAMINER:

DATE CONSIDERED:

4/19/01

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP form. Draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

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LIST OF PUBLICATIONS/MATERIALS CITED BY APPLICANT			Attorney Docket No. PHO-104	<u>Seri</u>	al No. 96, 837			
			Applicant ERIC WACHTER, et al.					
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FOREIGN PATENT DOCUMENTS								
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	FILING DATE		

112

 E.A. Wachter, Fisher et al. "Titanium: Sapphire Laser as an Excitation Source In Two-Photon Spectroscopy" Applied Spectroscopy, Vol. 51, no. 2, pp. 218-226 (1997)

JR

- Sun-Yung Chen, et al. "Theory of two-photon induced fluorescence anisotropy decay in membranes" Biophys. J. Biophysical Society, Vol. 64, pp. 1567-1575 (5/1993)

JR

 Joseph R. Lakowicz, et al. "Two-Color Two-Photon Excitation of Fluorescence" Photochemistry and Photobiology, pp. 632-635 (1996)

- George C. Nieman, et al. "A new electronic state of ammonia observed by multiphoton ionization", J. Chem. Phys. 68(12) pp. 5656-5657 (1978)

SL

rdyn Kee

-Philip M. Johnson, "The multiphoton ionization spectrum of benzene" Journal of Chemical Physics, Vol. 64, No. 10, 4143-4148 (5/1976)

EXAMINER:

DATE CONSIDERED:

4/19/01

LIST OF PUBLICATIONS/MATERIALS CITED BY APPLICANT			Attorney Docket No. PHO-104		al No.	
			Applicant ERIC WACHTER, et al.		, 	
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		FORE	IGN PATENT DOCUMENTS			
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	FILING DATE

25

- P.M. Johnson, et al. "The Discovery of a 3p Rydberg State in Benzene By Three-Photon Resonant Multiphoton Ionization Spectroscopy" Chemical Physics Letters, pp. 53-56 (1983)

JP2

- S.G. Grubb, et al. "The three-photon spectrum of the ¹B₂₁-¹A_{1g} transition in benzene: Analysis of vibronic and rotational structure" J. Chem. Phys. 81 (12), American Institute of Physics, pp. 5255-5265 (1984)

JR

- J.R. Cable, et al. "A condensed phase study of the benzene B₂₁-1A₁₉ three-photon transition" J. Chem. Phys. 85 (6), American Institute of Physics, pp. 3155-3164 (1986)

M

- Philip M. Johnson, "The multiphoton ionization spectrum of trans-1,3 butadiene" Journal of Chem. Physics, Vol. 64, No. 11, pp. 4638-4644 (1976)

EXAMINER:	DATE CONSIDERED:
Jordyn Kan	4/19/01

LIST OF PUBLICATIONS/MATERIALS CITED BY APPLICANT			Attorney Docket No. PHO-104	<u>Seri</u>	al No.			
			Applicant ERIC WACHTER, et al.					
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FOREIGN PATENT DOCUMENTS								
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	FILING DATE		
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JQ

- Mark Seaver, et al. "Double Resonance Multiphoton Ionization Studies of High Rydberg States in NO", J. Phys. Chem, 1983, 87, pp. 2226-2231. American Chemical Society

52

 Bennett H. Rockney, et al. "Multiphoton ionization of nitrogen dioxide: Four photon spectroscopy of the npo Rydberg series", J. Chem. Phys. Vol. 78, No. 12, (1983)

20

Ruth McDiarmid, et al. "Four-photon Resonant Multiphoton Ionization Spectroscopy", Chemical Physics Letters Vol. 76, No. 3, (1980)

5P

- D.L. Andrews, et al. "Polarization studies in multiphoton absorption spectroscopy", American Institute of Physics, J. Chem. Phys. 75(2), pp. 530-538 (1981)

EXAMINER:

DATE CONSIDERED:

4/12/01

								
LIST OF PUBLICATIONS/MATERIALS CITED BY APPLICANT			Attorney Docket No. PHO-104		al No.	>		
			Applicant ERIC WACHTER, et al.					
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FOREIGN PATENT DOCUMENTS								
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	FILING DATE		

R

- Ignacy Gryczyniski, et al. "Fluorescence Spectral Properties of Troponin C Mutant F22W with One-, Two-, and Three-Photon Excitation", Biophysical Journal, Vol. 71, pp. 3448-3453 (1996)

200

 Joseph R. Lakowicz, et al. "Time-Resolved Fluorescence Spectroscopy and Imaging of DNA Labeled with DAPI and Hoechst 33342 Using Three-Photon Excitation", Biophysical Journal, Vol. 72, pp. 567-578 (1997)

JR

- Ignacy Gryczynski, et al. "Rapid Communication - On the Possibility of Calcium Imaging Using INDO-1 With Three-Photon Excitation", Photochem. & Photobiology, Vol. 62, No. 4, pp. 804-808 (1995)

24

- Henryk Szmacinski, et al. "Three-Photon Induced Fluorescence of the Calcium Probe Indo-1", Biophysical Journal, Vol. 70, pp. 547-555 (1996)

EXAMINER:	DATE CONSIDERED:
Jordyn Ce	4/19/01

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LIST OF PUBLICATIONS/MATERIALS CITED BY APPLICANT			Attorney Docket No. PHO-104	Seri	al No.	>		
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FOREIGN PATENT DOCUMENTS								
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	FILING DATE		
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TR

- Guoqiang Xing, et al. "Modulation of resonant multiphoton ionization of CH₃1 by laser phase variation", American Institute of Physics, J. Chem. Phys. 104(3), pp. 826-831 (1996)

JR.

- Xuebin Wang, et al. "Phase control of absorption in large polyatomic molecules" American Institute of Physics, J. Chem. Phys. 105(8), pp. 2992-2997 (1996)

JR

- Flam, "Laser Chemistry: The Light Choice", Science, Vol. 266, pp. 215-217 (1994)

TR

- Christopher J. Bardeen, et al. "Feedback quantum control of molecular electronic population transfer", Chemical Physics Letters 280 (1997), pp. 151-158

EXAMINER:	\wedge	DATE CONSIDERED:
	Joselyn Kan	4/9/01

LIST OF PUBLICATIONS/MATERIALS CITED BY APPLICANT			Attorney Docket No. PHO-104		al No.	7
			Applicant ERIC WACHTER, et al.		. ,	
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		FORE	IGN PATENT DOCUMENTS			
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	FILING DATE

562

- Service "Training Lasers to Be Chemists", Science, Vol. 279, pp. 1847-1848 (1998)

R

- Richard N. Zare "Laser Control of Chemical Reactions", Science, Vol. 279, pp. 1875-1879 (1998)

JR

- David C. Clary, "Quantum Theory of Chemical Reaction Dynamics", Science, Vol. 279, pp. 1879-1882 (1998)

SR

- Niels H. Damrauer, et al. "Femtosecond Dynamics of Excited-State Evolution in [Ru(bpy)₃]²⁺", Science, Vol. 275, pp. 54-57 (1997)

20

- D. Zhong, et al. "Femtosecond Nucleophilic Substitution Reaction Dynamics" J. Am. Chem. Soc. 1997, 119 pp. 2305-2306

EXAMINER:	\cap		DATE CONSIDERED:	
Je	rely Ke	re-	4/19/01	

LIST OF PUBLICATIONS/MATERIALS CITED BY APPLICANT			Attorney Docket No. PHO-104		al No. 9/194.8	32		
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FOREIGN PATENT DOCUMENTS								
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	FILING DATE		

J12

 W.G. Fisher, et al. "Simultaneous Two-Photon Activation of Type-I Photodynamic Therapy Agents, Photochem. & Photobiol. 66(2), 1997 pp. 141-155

SR

 Christopher R. Shea, et al. "Mechanistic Investigation of Doxycycline Photosensitization by Picosecond-pulsed and Continuous Wave Laser Irradiation of Cells in Culture", Journal of Biol. Chem. Vol. 265, No. 11, pp. 5977-5982 (1990)

SR

- Dennis H. Oh, et al. "Two-Photon Excitation of 4'-Hydroxymethyl-4,5', 8-Trimethylpsoralen", Photochem. & Photobiol. 1997, 65(1), pp. 91-92

J.D.

- S. Singh, et al. "Three-Photon Absorption in Napthalene Crystals by Laser Excitation", Physical Review Letters, Vol. 12, pp. 612-614 (1964)

EXAMINER:	\wedge	\cap	DATE CONSIDERED:
,	Joselyn.	Kan	4/19/01

						
· ·			Attorney Docket No. PHO-104		al No. 1896. 83	7
LIST OF PUBLICATIONS/MATERIALS CITED BY APPLICANT			Applicant ERIC WACHTER, et al.			
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		FORE	IGN PATENT DOCUMENTS			
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	FILING DATE
±						



- Iain D. Miller "An Introduction to Medical Lasers", Biophotonics International, Sept/Oct 1997, pp. 50-51



 - Kim S. Frederickson, et al. "Precise Ablation of Skin With Reduced Collateral Damge Using the Femtosecond-Pulsed, Terawatt Titanium-Sapphire Laser", Arch Dermatol, Vol. 129, pp. 989-993 (1993)



- Shinichi Watanabe, et al. "Comparative Studies of Femtosecond To Microsecond Laser Pulses on Selective Pigmented Cell Injury in Skin", Photochem. & Photobiol. Vol. 53, No. 6, pp. 757-762 (1991)



- David Stern, et al. "Corneal Ablation by Nanosecond, Picosecond, and Femtosecond Lasers at 532 and 625 nm", Arch Ophthalmol, Vol. 107, pp. 587-592 (1989)

EXAMINER:	1-1-1-1-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	DATE CONSIDERED:
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		FORE	IGN PATENT DOCUMENTS			
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB - CLASS	FILING DATE

- Daniel X. Hammer, et al. "Experimental Investigation of Ultrashort Pulse Laser-Induced Breakdwon Thresholds in Aqueous Media", IEEE Journal of Quantum Electronics, Vol. 32, No. 4, pp. 670-678 (1996)
- Reginald Birngruber, et al. "Femtosecond Laser-Tissue Interactions:
 Retinal Injury Studies", IEEE Journal of Quantum Electronics, Vol. QE-23,
 No. 10, pp. 1836-1844 (1987)

EXAMINER:	DATE CONSIDERED:
Joeden Kan	4719101



LIST	OF	P	JBLICATIONS
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Attorney Docket No. PHO-104	<u>Serial No.</u> 09/096,832
Applicant Eric A. WACHTER et al	RECEIVED
<u>Filing Date</u> June 12, 1998	Group 1 1 1999

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	U.S. PATENT DOCUMENTS							
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		1	l leavinima pecerimas					
	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE		

OTHER PUBLICATIONS (Including Author, Title, Date, Pertinent Pages)

Shear, J.B. et al, "Multiphoton-Excited Visible Emission by Serotonin Solutions," Photochemistry and Photobiology, vol. 65 no. 6, pp. 931-936, 1997.

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DATE CONSIDERED:

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LIST OF PUBLICATIONS CITED BY APPLICANT

Attorney Docket No.	<u>Serial No.</u>
PHO 104	09/096,832
<u>Applicant</u> Eric A. WACHTER et al	
<u>Filing Date</u>	<u>Group</u>
June 12, 1998	3738

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
JR FR	4,822,335	04/18/89	Kawai et al	604	20	09/08/87
	5,034,613	07/23/91	Denk et al	250	458	11/14/89
	5,586,981	12/24/96	Hu	606	9	08/25/94
	5,829,448	11/03/98	Fisher et al	128	898	10/30/96

FOREIGN PATENT DOCUMENT

DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE

OTHER PUBLICATIONS (Including Author, Title, Date, Pertinent Pages)

JR

International Search Report for application no. PCT/US99/12056, dated September 13, 1999.

EXAMINER:

Joeden Ram

DATE CONSIDERED:

4/19/01

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP form. Draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

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